27 Sanson. Jan 7th 1829. Ch: No. 126

An Inaugural Essay On Dyspepsia

For Passed Feb. 27. 1829
The Degree of Doctor of Medicine
In the University
of Pennsylvania

By J. R. Griswold
of Virginia

Jan. 7th 1829

Dyspepsia

Considered as an irritation of the nerves of the Stomach, & modified by the degree of that irritation.

"Facies non omnibus una,
"Nec diversa, tamen, qualem decet esse Sororum".

When we consider the extensive sympathies of the stomach, "the central part of a most complicated structure" - the organic & functional disorders that may result in other organs, from a pathological condition of this - and the importance of its healthy action to the well being of the whole animal economy - we are not surprized that the disease under consideration should be a compound of Ailments, & Proteus like assume various shapes & terrors :- And when we consider the numerous inconveniences & interruptions, to which a morbid state of stomach subjects its victim, in the enjoyment of life & the rational pleasures of the world - how it retards his footsteps when

mounting the hill of Science - how it stays his pursuit of ambition or of gain - how it blights the buddings, & even the fully-matured fruit of his genius - how it damps his ardour of vigorous enterprize - & how it lessens his usefulness in the practice of a Profession or in performing his part on any stage for which his talents & acquirements fit him - When we consider these things - we have a slight view of the 50-headed Hydra we have to contend against, & of the necessity imposed upon us, in battling with the monster, not to rest satisfied with merely lopping off a head, which will grow again, but by well-directed thrusts, to effect his entire destruction.

The process of Digestion is coextensive with the Alimentary Canal. From the time of its mastication, to its voidance, our food is undergoing a continued series of changes - alteration in consistence, & increment or decrement of bulk. The Alimentary Canal is an irregular tube, continuous from the mouth to the anus - consisting of sections appropriated to different functions - each section sympathyzing with its fellows - & all

sympathysing extensively with the system at large - more especially - the middle portion, with its cooperating organs. The large intestine performs the least, & the stomach the most material part of the function of Digestion. The latter, & its operations, require particular attention, while the former, can be dismissed, with the slight notice already bestowed upon it.

From the mucous membrane of the stomach, & the follicles imbedded in it, are exuded mucus & a peculiar greyish viscous & insipid fluid called "Liquor Gastricus". The latter is poured out very abundantly during digestion, & to it, since the experiments of Spallanzani, has been ascribed the power of dissolving alimentary substances. In this, however, it is probably assisted by the salivary secretion, & the mucus of the mouth, pharynx & Oesophagus which are mixed with the food before its entrance into the stomach - by the liquids & atmospheric air ingested at the same time - by the natural heat of the stomach - by the muscular action of the stomach & the motion communicated by the Abdominal Muscles & the Diaphragm during

rec

"for
Ann
mer
ot
de
to
to
def
in
diff

Di
to b
ot
de
the
it a
th
ner
of p

respiration - but mostly, by nervous influence.

The doctrine of "Concoction" by Hippocrates - of "fermentation" by Van Helmont - of "putrefaction" by the Ancient Philosophers - of "Maceration" by Haller - were mere hypotheses, & have passed away "like baseless fabrics" The doctrine of "trituration" is more plausable, as it is known to occur in the gallinaceous animals - But it would be well to remember, that notwithstanding Aristotle in his definition of Man, made him differ from a goose, merely, in being "a two legged animal without feathers," he yet differs from the feathered tribe, in having no gizzard.

The doctrine attributing the principal agency in Digestion to Gastric juice & Nervous influence appears to be better founded than any Physiology has furnished. The experiments of Wilson Philip satisfactorily prove this doctrine to be well based. From his experiments it appears, that the food first taken in applies itself to the internal parieties of the stomach, by which the Gastric nerves are excited & in consequence of which a flow of Gastric juice ensues - which by a vital, or if you

place, a chemico-vital process takes place, changes and converts into a homogeneous mass, the portion of alimentary matter thus in apposition. The muscular powers of the stomach then come into play & move the stratum thus chymified to the Pylorus, making room for another stratum which is to succeed & undergo the same process. & then in like manner be moved to the Pyloric orifice. & soon, until the whole contents of the stomach have undergone the requisite change. the successive chymified masses being discharged into the Duodenum as they respectively arrive at the Pylorus. —

After the contents of the stomach are discharged into the Duodenum, other changes take place thro' the agency of the Hepatic & Pancreatic fluids, by a process analogous perhaps to that of the stomach — the bile there performing a part similar to that of the Gastric juice & the pancreatic secretion supplying the place of saliva — & chyle is formed. It hence appears, that tho' the most important part of Digestion takes place in the stomach, yet the process would be very incomplete without the antece-

-dent operation of mandication in the mouth, and the subsequent one, of chylification in the duodenum.

(Dyspepsia is generally used as a synonyme of Indigestion, but, in my humble opinion very incorrectly — the one signifying difficult digestion or "difficult, bad or disordered digestion"[o] — the other, no digestion at all. The latter, if entitled to a place in well defined nosology, must be the same, in effect, as Gastritis or Lientery — a state of things very different from that which the term is made to represent. The former pregnant with the idea of "concoction" is repugnant to the light which the present state of Physiology sheds upon the subject of Digestion & is objectionable inasmuch as many of the symptoms of the disease may exist & yet digestion go on regularly & efficiently. But the greatest objection to the term is, that it gives no idea of the Disease but merely of the effects of the disease. As a conventional term, however, it may still be retained — common usage giving to it a meaning which "δυς" & "πεπτεω" its roots will not.

o Pr. etc. Coleman.

like the phrase "the sun rises" so incorrect as to matter of fact it may be convenient in order to avoid circumlocution. The title "Morbid Sensibility of Stomach" applied to it by Dr James Johnson of England or that of "Irritation Subirritation or Superirritation" (according to the existing state of the stomach) suggested by Dr John Bell Institute Lecturer of this city, would be signs of the things signified; & could be objected to only on account of their length.

The idea, that the disease is a vitiated concoction of alimentary matter dependent upon debility of stomach, has been the cause of infinite evil. It has led to a premature, indiscriminate & intemperate use of stimuli tonics & "quickners of appetite" to the aggravation & perpetuation of the condition they were intended to remedy. It would be well then to inspire the community, either by its title or otherwise that this disease is one of irritation - giving rise to different complaints accordingly as the irritation is increased or diminished, & accordingly as other parts are involved, sympathetically or

or otherwise.

Those who attribute the disease to debility are as correct as the drunkard who ascribes his "Blue-Devil" feelings in the morning, to the fogs. They know the effects, but mistake the cause — "the muscular debility, & depraved secretion being the effect & want of healthy action in the nerves & not the cause".

Muscular debility, however, after having been induced by a morbid state of the nerves, may very probably, serve to keep up that state of the nerves.

The fact that in general there is no decided irritation in the stomach has been the great stumbling block. This is readily exploicable by the consideration that the disease is effected in a mucous membrane which does not ordinarily transmit to the common sensorium any intelligence of its conditions, which may even be inflamed without making any communication by which its sufferings might be known: the fact may also be accounted for by a peculiarity of the sympathetic nerves which, notwithstanding, they are excited by

have some peculiar stimulus yet in a normal state gives us no consciousness, or at least a very faint sensation, of impressions made upon them, except of those from articles of high or low degrees of temperature or of irritating qualities. Or some irritation may exist for a length of time without being evidenced by symptoms. Whenever conscious sensibility is excited in the stomach, it should be considered an entirely about it matter, against injuries or impressions. Organs & parts, other than the stomach itself, manifest to us the effects of ingestion from food viscus. Either a simple digestible repast, the experience as a general sensation, comfortable refreshment & renovated strength, but very little of this sensation is referable to the stomach, except as a point from which the radiated sensations are diffused. Upon this fact Dr Johnson lays great stress. "For (says he) if the nerves of the stomach are capable of exciting emotions of pleasure in the mind & comfortable sensations in the body on an application of good food, we shall find that the same nerves when in a disordered state are

generally capable of exciting the most gloomy thoughts in the mind & the most painful sensations in the body on the speculative. The very same species of reflection either tends or writhing an unpleasant sensation in the stomach itself. Various toxicous & medicinal agents in a state of health, may, by irritating the nerves, produce an analogous influence over mind & body. Depressed spirits, Castles, hypochondriac symptoms, are very apt to result from the operation of medicines or from ingesta which resist the assimilative processes of the stomach in a pathological condition, and possible food "will derange the mental & corporeal functions, often without the slightest sensible effect on the stomach & bowels". The patient under such circumstances, will be susceptible of the keenest sensations of the unhappy kind. Will become irritable & irascible - distrustful & querulous - gloomy - & very miserable from continual unreasonable solicitudes, fearful forebodings & causeless suspicions. The body also will be a fellow sufferer with the mind - anomalous & erratic pains will fly from part

in part — "the whole system will be ill at ease" & the patient will have, what are commonly called, "the Fidgets". Thus many happiness be removed from "many valuable members of society whose lives are rendered wretched by morbid sensitiveness of mind having its unsuspected source in a morbid sensibility of the stomach & bowels"*

Dyspepsia is considered by many as chronic diarrhœa & has been so treated by the Younger & Andral.x but there are good reasons why it should not be so considered. — 1. It is confounding two diseases differing in their symptoms (as will appear hereafter from Diagnosis)

2. Serious mischief will result from identifying the two diseases, & as a consequence, prescribing a similar treatment: In the one case emetics being serviceable, relieving the stomach — checking nausea — indirectly invigorating tone to the stomach & determining to the surface. In the other, acting as irritants, increasing debility & inducing phlogosis. As in the one case exercise improves the condition of the patient — also in the other, it is also exciting brain fever — &

emollients & Demulcents aggravate. In the other, exciting & vitiated food must be prescribed – Demulcent drinks & rest insisted upon.

3. Dissections do not prove an identity of disease (excluding in this remark, the condition existing in what is called "the phlogosic stage" which I consider a distinct disease, connected with Dyspepsia merely as an effect, with its cause.) Post Mortem examinations of those who have suffered from the phlogosic stage reveal the symptoms of Gastritis. As in common forms, where Gastritis was not existed, there are only evidences of Disorganization & these may result equally from Nervous irritation or subinflammation – the structural derangements being less extensive in the former, than in the latter. In Chronic Gastritis, as I am informed by my preceptor Dr Horner, there is a peculiar enlargement of the veins & a congestion not uniform – the veins bulging in the middle & tapering to the ends – Besides this – the mucous membrane is covered with a brown fur. —

4. The point where cerebral irritation ends & Congestion begins is not definitely known. – Many of the phenomena attributed to Cerebrosis may be due to super-nervous irritation. Professor Chapman appears to have this idea for he says "Cerebrosis in Dyspepsia is more of a nervous than an organic affection." – The Hunterian Medal also treats Dyspepsia as "Nervous" Charcot confirms the idea when he says "Neither can we doubt that among the various disturbances of function which the stomach undergoes there are many which imitate more or less completely acute or chronic Gastritis, and which are in reality owing to a morbid state of the gastric nerves or the centres of the Sympathetic System".

5. The only reason in my opinion, why Dyspepsia has ever been considered Nervous Gastritis is the considering of the state of Cerebrosis, which is sometimes induced by the Disease, as a stage of the Disease. You might as well consider Mania a-Potu – intoxication – because it is sometimes induced by hard drinking; or – Ordinary – Dyspepsia, because it forms one of its concomitants.

Dyspepsia is a very common disease but very seldom is you see what is called "the phlogosis stage". In general there is, what may be called "the expression" or tone of the circulation — so little disturbance manifest themselves — there is little thirst — the tongue is moist & slow — & perspiration is easily excited even by simply exercising. It is true that a febrile condition may be easily induced, owing to the existing state of irritation the causes of inflammation acting more readily. But the same state may be induced in a perfectly healthy man by the same causes more intensely applied. If then, a state of inflammation does not ordinarily exist, why should the disease be considered as an ~~irritation~~ inflammation? When it does occur, it appears to be an active inflammation. I blame the authority of my preceptor Dr Armor for saying "a nervous irritation may terminate in disorganization, but not in sub inflammation"* But whether acute or chronic the inflammation is the consequence of the nervous irritation — should not be confounded with it. It is a convenient & a serious

* This fact is one of those stated on page 18 & stated in the

liver — a different state of things altogether — the patient's feelings are altogether different — and the symptoms differ as widely from those which precedes, as Gastritis differs from Dyspepsia. In fact, the disease becomes Gastritis, modified by the cause & the existing state of system. The symptoms & the treatment are the same, modified always by the circumstances just alluded to. Why not then call this new state of things Gastritis? Gastritis consequent upon Dyspepsia, I am call an inflammation of the liver consequent upon Dyspepsia, Hepatitis or Hepatalgia. Why not apply the term Dyspepsia to all the states induced by it? We are taught by Coxe & Chapman, by Dr Jackson, & by Dr Horner, that nervous irritation may eventually in damaging irritation. But after the conversion of one into the other we hear different names applied to the new condition. We range the terms Gastritis — Enteritis — Bronchitis & a great many other ~~itises~~ set forth in bold relief, as expressive of states consequent upon nervous irritation. Let this analogy apply to Dyspepsia & my point is established.

From what has been said, I think it apparent, that Dyspepsia, as it ordinarily presents itself, is not a state of inflammation, either acute or chronic, nor yet a state of debility - but strictly & purely a state of nervous irritation. & that the modifications of its symptoms & the variegated display of sympathies depend upon the state & degree of that irritation.

In treating this Disease then, I shall exclude all consideration of what is called "the phlogistic stage". I do this with "fear & trembling" - knowing that, in this, I differ from the greatest authorities of the age & from one too, who, on all occasions, commands, my highest respect, & with whom I am extremely sorry to be at variance - particularly, as the Ides of March are approaching. I would not rashly attempt to tear down an edifice he might have erected lest if I should succeed, I might be buried in its ruins. I would permit the building to stand as an "esto perpetua" to his fame - But humbly beg permission, no to inhabit it

That Dyspepsia is a disease of irritation is evidenced by the following facts.

1. — When primary, all its causes are irritants either — directly or indirectly.

2. When secondary — there is still irritation, either by sympathy or metastasis from an irritated mucous surface.

3. It is a disease of gradual development — aggravated by irritating ingesta & alleviated & cured by an abstinence from irritating causes. —

4. All the phenomena of the disease are those of irritation agreeably to the Laws of Irritation as laid down by Dr Samuel Jackson Professor of the Institutes in a paper upon that subject in 1828 in "Chapman's Journal," as well as in his lectures at the University.

That the irritation is nervous & not sanguineous is inferable from the absence of febrility & inflammatory symptoms.

Dr Johnson (secretary referred to) who himself had been a great sufferer by the disease considers it altogether a morbid state of the nerves.

Professor Chapman & Milton Priestley, besides a stage

of "nervous irritation" make a "phlogosis stage" & even extend their views to "structural derangements in other parts". But, from what has been said above, I am convinced that the state of phlogosis & the derangements of other parts are the consequences of the disease, induced by neglect or bad management, in the same way that Pneumonia follows a neglected or badly-managed Catarrh, and Phthisis Pulmonalis, the ill-treated Pneumonia. The dyspeptic, by imprudences, adds irritation to irritation - phlogosis is induced (a new disease) - phlogosis, suffered to run a lengthened course, implicates other parts. One thing follows another, but is a different thing from that other. -

In the further consideration of this disease, I shall adopt Dr. Bell's suggestion, & treat of it as a state of sub irritation, irritation or super irritation.

By making 3 stages I do not wish to be understood as believing that one passes immediately into the other - by a Colossian stride. I scarcely believe this of any disease. I mean by them, what a traveller in the Mail Coach would mean by the different stages in his

journey – the end of one, & the commencement of another course of action – a conspicuous point in the chart of the road, a place where the horses are to be changed & new treatment experienced. It is only with a view to the difference of treatment that any advantage results from making different stages in a disease. The intermediate gradations, requiring generally no variation of treatment, require no particular designation.

That there are three distinct grades of the disease, altho' not regular in their order of occurrence, nor in their continuance, nor in their intensity – being acute, chronic, intermittent, remittent, continued, or fugitive – varied in their results, materially, by the habits of the individual & other circumstances – must be admitted by all who have been observant of the disease, or who have been so unfortunate as to have been the object of its affections. – Ask any intelligent dyspeptic about the progressive movement of his disease with him, & he will tell you, that at first, his stomach behaved well enough except when

but out of order — by too full a meal — too free a draught or too liberal an indulgence in indigestibles or stimulants: that when regular & temperate in his habits, he experienced no inconvenience, but that listening to the suggestions of appetite rather than the admonitions of prudence, he was frequently guilty of irregularities, dinning daily at heavy times a day against peace of mind & comfortable feeling until he became so that he scarcely ever felt well — costive, dull, heavy, indisposed to exertion — averse to what he formerly delighted in — in fine — low spirited: & to relieve which condition he applied himself to his bottle — to his tobacco — to frequent & immoderate draughts of strong coffee or strong tea, or to some nostrum recommended by a benevolent neighbor — or some good natured quack, till he was brought to such a state, that he said almost —

"To live not be — or live to be —
——— such a thing as himself"

In other words — that there was 1. sub-irritation — 2. irritation & 3 super-irritation. ———

Diagnosis. — To attempt to enumerate all the diseases with which the stomach sympathizes, — with which, from prevalence of dyspeptic symptoms, as the ordinary effects, the physician should be unfamiliar, would be a endless & profitless task. Suffice it to say, that the most common of these, are the urinary-genital-intestinal & visceral diseases. In most cases little difficulty would be experienced by an enlightened practitioner. But as serious mischief has more than once resulted from mistaking it for Hepatic affection, I will with diffidence, venture a few remarks, upon the diagnosis in that respect. In Western Texas, where Bilious complaints prevail, the mistake is but too common. Even in our Southern States, the liver is considered the grand "fons et origo malorum" & the host of maladies ostensibly "flesh is heir to" — A Sandera Bop rebels with all the evils to which the microcosm man is subject. If this be true that organ must have had some important agency in Adam's transgression, since it has dat the curse of the whole body centred on its

in vole self: if this be true, the great men of Europe & of this University, must have had their ability for their aim, in describing & dispathing diseases & topical affections, as appertaining to different parts of our structure: & if this be true, he, we, must be like some great warlike kingdom, which carries on foreign conflicts, but within itself, manifests none of the marks of destructive warfare.

Our liver doctors will scarcely admit that there is such a disease as the stomach, or that there be, that it can, primarily, "in seipso" be affected with disease. Every little pain, stitch or uneasiness or every little deviation in the skin from its natural hue, is, by them, considered prima facie evidence of a diseased liver. To these, be added — nausea — vomiting of bilious matters — differently-colored stools or costiveness they have proof positive of a redundancy of bile — or of a deficiency or retention of it — depending upon its secretion or action of the liver. — They immediately narrow in their conversion & reading, what, by the eye, is death to the dyspeptic, direct to alter or quicken the secretory process

or to emulge superfluous life, until they have emulged the vital principle from an unfortunate mortal who, under different circumstances, might have remained a "monument of sparing mercy"

To establish a correct Diagnosis therefore is a great desideratum. But, unfortunately, it is difficult of accomplishment. I have not the vanity to suppose myself equal to the task. But I do presume, that I am able to point out certain sources of error. The great mistake lies in considering as altogether diagnostic of liver disease signs which are alike common to it & to Dyspepsia — such as the following —

1. Stools variously colored & of different consistence — That this is a symptom common to both I would refer to Drs Chapman, Johnson, Wilson Philip, Paine & Dason Good. Calomel, Calleu & Thomas Practice. — The variance in color depending in a great measure upon a greater or less degree of acidity in the digestive viz — and the differences in consistence upon the length of time the feces have been retained & the greater or less quantity.

of intestinal exhalation.

2. Pains in different parts. This symptom also, is enumerated by the same writer amongst the symptoms of Dyspepsia as well as among those of Hepatic disease.

3. Irregularities of the Bowels. That this symptom is common to both, the experience of the whole profession will testify.

4. Pain upon lying on left side. This is generally considered as exclusively & absolutely diagnostic of liver disease. But Mr Gibson Philip says "pain when lying on left side is an early symptom of Indigestion — more rarely on right — after a while to lie on either side is uncomfortable"[1]

5. Sallow complexion & yellowness of the eye & skin. This is generally considered as exclusively diagnostic of Hepatic disease as the 4th. But Dr Johnson[II] "very frequently the sallow complexion & yellowness of the eye supposed to indicate a Bilious complaint are caused by depressing passions & emotions" & Professor Chapman teaches us that even the jaundiced look may be occasioned by the same causes. —

1 — Vide Philip on Indigestion Page 23. — II Vide Johnson on Morbid Irritability of Stomach Page

From all this, I conclude that we should be very careful in our investigations, & never form a Diagnosis from any one symptom. Ill of the stomach combined with pain at the shoulder blade, dull heavy pain in region of the liver, clay-colored stools & yellow furred tongue, would warrant us in considering it an acute Bilious Disease. We should then ascertain whether it be secondary, depending upon diseased state of stomach & likely to yield upon vomiting that or not, or whether it be primary, requiring an energetic anti-bilious course. To ascertain this, we should scrutinize the history of the case, take into consideration the climate, season of the year, & the habits & predispositions of the patient — we require into the exciting causes & concomitant symptoms. You may generally conclude, know which is primary & which secondary, by this — the organ primarily diseased will in the commencement have made the most complaint. But still, when the Pathologia is feebly developed the Diagnosis is matter of great difficulty.

"Felix — qui potuit medium cognoscere latum"

To make the distinction between Dyspepsia & Chronic Gastritis evident it is only necessary to set down some of the prominent symptoms of the latter as given by Professor Chapman. He precedes his exposition of the substitutes by saying "it may be considered a sequel of the acute imperfectly cured or an original inflection induced on a debilitated state of the same tissues. It is a disease of frequent occurrence & has been mistaken for Dyspepsia & under the impression improperly treated." He then gives the following among other symptoms — "as: "Gastric uneasiness — great aversion to food — particularly to substantial articles — the disease always aggravated by eating — thirst always prevails & a great desire for cold water — the countenance expresses mental uneasiness — there is hectic excitement — alternate chills & flushes — heat in palms of hands & soles of feet. As it proceeds the preceding symptoms are aggravated — there is great tenderness of the Epigastrium on pressure — pain in stomach — tongue furred in centre — edges florid — sometimes resembling dissected muscle, with its papillæ elongated — pulse full quick &

cordet. In this way it proceeds till it ends in the most distressing condition – the skin becomes leaden or muddy constricted & clinging to the inner eye sunken & hideous & the mind affected with every kind of hallucination of judgment".

It is only necessary for me to say that no difficulty in giving an account of this disease would enumerate the above symptoms. –

Dyspepsia may be confounded with torpor of the duodenum, or rich of the colon. A little attention will prevent such mistakes. In the latter affections, the pain comes on long after eating & till time enough has elapsed for the food to have passed out of the stomach. In Dyspepsia, the pain comes on often before rising from table – always soon after eating.

Palpitations of the heart not an uncommon symptom. Dyspepsia are sometimes considered and treated as an organic affection of the heart – but may be distinguished from such affection – by their connection with dyspeptic symptoms – their periodical recurrence – their greater violence & how the pulsation at the heart & wrist not being synchronous.

(5) PROGNOSIS. – Cases of long standing, especially if other organs are involved offer little prospect of radical cure. When the disease has arisen from, or is kept up by habits of debauch or intoxication which habits are persisted in, or from sedentary employments – intense study – depressing passions or such like causes not obviated – or where permanent derangement of structure has taken place – in the language of Professor Chapman, "We can only prescribe palliatives that we can not relieve". But in the commencement before any organic disease has been induced the patient may always be cured by a rigid practice of self denial & a faithful manifested by the use of means. –

SYMPTOMS. Such as are referable to the stomach itself or to the sympathies between it and other parts.

In the stage of sub irritation, the symptoms are dull & are occasioned by the quantity or quality of food, – as sense of distention after eating, flatulence, eructations, burning

kinds - only bitter acid regurgitations of the odor & taste of the food last taken - sometimes attended with undigested portions of food - concomitant with these are unpleasant sensations "circa cardiam" squeamishness - nausea or vomiting - restlessness as to rest - with unpleasant dreams, & occasional somnambulism.

In the state of irritation, of hypersensitiveness the muscles always dependent upon the nerves become excitable & we have debility of stomach & deranged secretions heartburn sensation & eminence irregularity of pulse, in most part slow & feeble - occasionally irritated - moist, clammy, dentate, tongue covered with white, or pale - sometimes yellow consciousness - sense of muscular weakness - irritability - languor - particularly after exercise; enamour of warm rooms - mental anxieties, irascibility of temper - fickleness of mind - frequent headaches, the bowels do not act as readily as usual - the urine is turbid & deposits a sediment there is a want of great discomfort - appetite - miserable taste in the mouth in the morning - foetid breath - the intellect becomes bestrewed about his state of health & is very irritated - the memory is impaired & the intellect otherwise deranged -

there is costiveness – small pulse sometimes chilliness –

In the third stage – super-irritation – all the preceding symptoms are aggravated – the delirium is more inveterate – constipation more inveterate – there is greater depression of the animal spirits there is greater impairment of the sensorial & mental faculties, the patient finds it difficult at times to command his attention & is "incapable of his usual mental exertions" – "a clear head, a connected train of reasoning" there is greater restlessness at night, the remedies are obstinate – considerable fatigue & perspiration after slight exercise – total weakness after the operation of a purgative – In the Dorsal prolapsus there is inveterate costiveness – occasionally alternated with diarrhoea – the hair harsh, sometimes fully more or less tinged – green flesh, red but generally of firm consistence & light color – there are pains in the breast or side or head – disordered by slight tenderness of the skin – the Dolorosa – palpitations of the heart – hypochondria, gastrodynia, cardiodynia, hysteria or hypochondriasis – sometimes even retained affections – the ano-

-ienance is pale & there is great debility & emaciation.

CAUSES. are either direct or indirect. those I shall enumerate from Notes taken during Dr Chapman's lecture upon the subject. to wit. "For great an indulgence in eating, & drinking, by which the stomach is overdistended. - particular articles in large quantity - as strong green tea or coffee - acid drinks - too free a use of vegetables or of crude or undigestible animal food - luxurious diet - sudden modes of living too suddenly adopted. Dyspepsia is frequently induced in young Ladies of Fashion in consequence of changing their rich luxurious dishes for low & meagre diet, in order to reduce to fulness & form delicate - Starvation will produce the disease. Certain medicines, too often taken, as emetics - drastic purges - many of the saline preparations, especially Nitre - Young people who from whom are continually taking medicines would do well to remember the old in Epitaph "I was well, wished to be better, took medicine & died". Opium frequently produces the disease. But the most common cause of

the habitual use of Tobacco - (as produced by this it frequently proves obstinate - but sometimes yields to the discontinuance of the article -) intense study or application to business - inordinate venery - Grief or disappointment."

Upon the whole the causes most frequently inducing the disease are overdistention of the stomach either by food or drinks - unnatural stimulation of it by spirituous liquors or high seasoned food - the habitual use of tobacco - late hours - sedentary employments - mental application combined with impure air, want of exercise & inattention to cleanliness.

The disease may exist - or sympathetically - from diseases of other viscera, or by metastasis - in consequence of repelled eruptions or retrocedent Gout.

Treatment. Is dietic & medicinal —

The indications are 1. To remove offending causes - 2. To obviate accidental symptoms - 3 to restore the stomach to its proper tone & functions.

The different treatment will be required accor-

-ding as the disease is idiopathic or symptomatic. When the latter, our main attack must be made against the primary affection, & slight skirmishing merely against annoying but secondary symptoms. Drive the enemy from his strongholds & all his subsidiaries must fall. It has been said that "symptomatic local diseases seem to be the curative efforts of Nature - producing a diversion from the diseased organ"¶ &c &c - We ought to pay Nature the compliment of not thwarting her good intentions but direct our kindly assistance to the organ she wishes to relieve. But it may happen that the secondary affection is more urgent than the primary, & so loud in its calls for relief that it must be first attended to, or it has been existed so long as to accumulate & lock up the primary disease or as to have become independent of it. In such case, we must make our first & best efforts against that quarter whence we are most molested & then turn our weapons against that which was the instigator. Most frequently, however, dyspepsia is a primary disease & when such the treatment must be

¶ Dr John James Ao 1st - "Chapman's Journal"

adapted to the state of the digestive tract.

In the first state of sub-irritation all that is necessary is to avoid errors in diet particularly as to quantity, & to obviate remote causes. Medicines are not required unless the stomach be foul. "People generally complain of a sense of distention after eating — flatulent & acid eructations after eating, who, notwithstanding enjoy good general health, & find that these symptoms may be prevented by taking less food & that of a more digestible quality."[11]

The second state — irritation — is the stage in which the advice of a physician is for the first time requested: the irritation of the nerves of the stomach having existed for some time, an impairment of function has in a greater or less degree taken place — the gastric juice is vitiated in quality or deficient or excessive in quantity — in consequence of which the food is not readily reduced to a chymous pulp, & acids & sordes & crudities are generated & accumulate. Which remaining in the stomach embedded its functions, increase irritation and

[11] Philip on Indigestion page 15

produce debility. Under such circumstances, none can doubt the propriety of an emetic to cleanse the stomach of offensive contents & rectify its secretions. To answer the indication, Ipecac:- is preferable, inasmuch as the two-fold principle of evacuating the stomach & the same time making a strong impression on the system." o This may be repeated if indicated by the tongue & other circumstances. Professor Coxe advises that Ipecac, in these cases, should be first given as an emetic & then in small doses as a tonic. Gentle purges will next be necessary - the condition of the bowels being somewhat similar to that of the stomach. The milder cathartics will be best - as calcined Magnesia - Castor Oil - Rhubarb combined with castile soap or in the form of the "Crystallic Lemonades". Purgation should not be carried to any great extent - in bracing & saline articles should be carefully avoided. A combination of several of the mercurial medicines is often better than any of them singly. Where there is morbid sensibility in any great degree in the stomach & bowels it is of great consequence to join the sedatives or

o Professor Chapman.

some gentle anodyne with the aperients"[*]

The Liver having rid the stomach & bowels of the morbid contents it would be well to establish some counterirritation. An issue or a blister would no doubt be serviceable. Professor Chapman states that he has known good effects result from an Opium plaster over the Epigastrium. The Warm Bath as a soother of irritability may be useful. It will sometimes be necessary to keep up a soothing effect upon the Nerves, by Medicines which are calculated to allay their irritation. When there is scanty Urinary Secretion Dr Johnson recommends the following formula —

℞. Hyoscyam: grs ij aut iij } to be taken
Mass. Cœrul: gr j — } q. q.
Pulv. Ipecac. Comp. gr 4 or 6 } sexta hora

In other cases the following prescriptions of Professor Chapman's will doubtless be found serviceable —

℞. Sulph: Zinci gr 4 } or
Acetat: Saturni gr j } ℞. Nitr gr 4
Pulvis: Capsic: gr 4 or 6 } Calh: Zinci gr iv

The Nitrate of Silver is recommended with very good

[*] Dr James Johnson — Pags. 120 of his work on "morbid sensibility of stomach"

reasons, by Dr Johnson, in dose ½ gr. 3 times a day at first – gradually increasing to ij or iij grs in the 24 hours – to be given in crumb of bread. It is worthy of trial. It may be combined with opiums or with bitters. What pain would be all these medicinal means without the aid of diet! Dr Osiander is in fact our chief author, as will hereafter be more particularly insisted on. In this place, suffice it to say the food should be of the least irritating, the most digestible & in small quantity, most nutritious kind. The greatest attention should be paid to this from the commencement, throughout the continuance of the disease, & afterwards in prophylaxis.

In irritated state of stomach being subdued by the above course, or containing, as a consequence of debility, bruises & bitters may be resorted to. In every object in using them is to strengthen but not excite. If irritability be great they increase it & weaken instead of invigorating. If given before the reduction of morbid sensibility they produce great disturbance,

in the system & may change irritation into inflammation." To be serviceable they must not be given in large doses or long continued. Columbo & Quassia - Gentian Bark, Chop. & Sulph. Quinine & Rust of Iron are commonly resorted to. The first & the last are very good. The Sulph. Quinine is strenuously recommended by Johnson as having all the properties of other bitters - devoid of their acrid & other nauseating qualities. In small doses, as 2 or 3 times a day, dissolved in a teaspoonful of any bitter tincture it has an excellent effect in strengthening & soothing its nerves - cleansing the tongue, improving the appetite - strengthening digestion & imparting tone & tranquility to the mind & body." "It should not be given in pill, as in such form it is apt to hang off unknown & disappoint the practitioner." "But the best of all Tonics is a well regulated Diet with gentle exercise in the open air." — The above plan of Treatment with an attention to occasional urgent symptoms will be all that is necessary for the stomach irritation.

An state of super-irritation may be induced & kept up by morbid secretions acting on irritated nerves, or may be an aggravation of nervous irritation caused by acrid or stimulating ingesta. An emetic may be necessary to free the stomach from irritating contents. But as this state approaches to, & is disposed to run into sanguine irritation, we must have a care in administering emetics. & but more guarded still should we be, with regard to tonics & bitters. They are altogether inadmissible. We must trust to the most soothing & sanative measures - to topical bleeding & antiperiodics, cooling acidulated & aromatic drinks - abstraction of every thing calculated to produce excitement, & opiates as by enemata. When by these means we have reduced the irritation, the remedies adapted to the first stages, will become appropriate. It will be well to mention here that in this condition of stomach a table spoonful of lemon juice, according to Dr. Pearson's directions with other proper laxatives of tartar in the morning.

The remainder of the treatment, as well as the prevention, will be indicated under the treatment adapted to the particular derangements of system which attend them. For

(Cardialgia - depending on an acid state of stomach, it may be in the stomach alone. The cure is to infer it when it is so, or when it may be corrected by the alkalies or rhubarb or better as alkaline. Diet - as poor. Fish, crabs & lobsters, rice milk &c - & as little acids & acescents.

A good medicine for the disease, or in its place, is - a piece the size of a pea to be taken in a wineglass of water & taken an half hour after the exhibition of food, as recommended by Dr Chesick. Chalman & calcareous, would be a good substitute for the above acting on the same principle. Dr Alexander said, I have the authority of Professor Chapman for saying - "the acids, mineral & vegetable, strange to it may seem, sometimes succeed, even as the alkalities & aromatics."

Blanché recommends brandy and pure lime-water & milk will be serviceable. When constipation is co-existent with cardialgia, Magnesia is the most appropriate remedy.

e Nausea & Vomiting. Being the consequence of offensive matters in the stomach, emesis should be encouraged by draughts of warm water or of warm infusion of chamomile or camomile or by emetics. Being accompanied with irritability, cool effervescent draughts, ice, boiled milk, infusion of coffee or tea with or without sugar, soda water or a lime, frequently so called, or some of the preparations will be administered in the same way.

Dyspepsia considered as a chronic affection of the muscular coat of the stomach is still thought to be a matter of speculation. It can be fairly treated by Hydrocyanic acid & Liq. Opii Sed. Comp. Opium is believed by Professor Chapman. The Professor adds to the Dr. Jackson & has been inclined that Prussic acid would here be appropriate.

Professor Chapman states two cases that occurred in his own practice in which the most violent attacks were immediately relieved on drinking a quart of milk. If the opinion does not yield to these means U.S. Warm Bath, fomentations or blisters to epigastrium may be resorted to. If the attack recurs, Dr Chapman recommends Oxyd Bismuth Grs. viij or X with Sulphate & Sulphuric of Quinchona.

Flatulence. When associated with Cardialgia, may be relieved by the same agents. When with vertigo, the most effective of that & other, when it exists independently, is Aromatics. If associated with Warm Bath & other Antispasmodics. When it is attended with acid stomach & undigested aliments Pulv. Charcoal a teaspoonful 2 or 3 times a day, is highly recommended.

Pyrosis at the Epigastrium. To relieve this, a hard dry Saccac: filled - containing from ij to v grs. Saccac: is recommended by Professor Chapman.

Pyrosis. Treat this with Emetics & Antacids

Dr. Sarsfr in dose gtts XV and XX is stated to be eminently beneficial.

Palpitations of the heart may be palliated by Anti-acids & Intermediates & cured by the removal of the dyspeptic state of stomach.

Cephalalgia. The remedies, in general, are Emetics, Magnesia & vegetable acids according to the state of the stomach. Dr. Elliot Chapman states that he has experienced, in his own person, decided & immediate relief from a wine glassful of Lemon juice sweetened with Loaf Sugar. Where the determination of blood to the head is, & cans may be necessary - to be succeeded sometimes by Blisters to the neck. -

Neuralgic affections & affections of the Eyes will be best treated by rectifying the condition of the stomach on which they depend.

Constipation is the most, or one, abundant in the disease & tends probably more than any other to aggravate it. For its removal, when a resort is had to medicines none but aperients & the mildest purges

should be given. Purgatives should be altogether proscribed. "That medicine which most slowly & without irritation clears the alimentary canal – permitting the nutriments to be taken up by the absorbents – gently stimulating the large intestines to discharge their useless residuum is the one to which we should always resort" !! Dock Dr considers to be the "peristaltic persuader" – aloes & rhubarb & magnesia – a teaspoonful each night & morning – Rhubarb made into pills with Castile soap, taken morning & night so as to produce one gentle evacuation – or pills made with Castile soap & equal parts of Rhubarb & Aloes – Pale Charcoal. A table spoonful 3 times a day – especially when the breath & excretions are fœtid. Calomel when the liver is affected: the "Dinner Pill" when there is torpor of the intestines. When the fæces are hard & inactive – Compound Rhemnus or the Seroph – to be succeeded by Aloetic pills. A very agreeable & effectual laxative is one which in many cases will supersede the necessity of all others, viz. prunes stewed

in a glass tea-cup - a decoction of senna to be sweetened with a few drops of rum, filled up with water - the whole to be simmered till the tea becomes a syrup - pouring off the branches - a dose. In treating this symptom we should carefully avoid those articles which produce watery stools or are otherwise drastic in their operation. Our great aim should be, to subjugate, medicines alternately by diet - to a regular devotion at Evacuation & temperance.

The other affections concomitant with or consequent to Dyspepsia, must, from my restricted limits, be passed by, with the bare remark, that they, as well as the above, are never all seen together - that they, for the most part, appear either singly or in an association of two or more at a time - & that they exhibit themselves in different forms & degrees at different times. In whatever mode or shape, however they may appear one golden rule should be observed - treat them medically, but with gentleness - with such articles as least irritate & distress the digestive

separately."[1]

DIET. The axiom that "chronic diseases require chronic remedies" applies with special force to confirmed Dyspepsia. After it has been long persistent, its cure must be the work of time, & effected chiefly through the agency of a well regulated diet.

The dietetic treatment must of course be varied according to the stage of the complaint. In the first stages, nourishing, digestible (but not greasy) food may be allowed. In fact none but the mildest-flavored articles. In every stage errors in excess are to be especially guarded against. Of these errors, the patient will be convicted by his own feelings after each indulgence, & consequently in this respect he will be "his own best physician". After thoroughly ascertaining, the patient should confine himself to the quantity & quality of food which produces "no languor after eating; no unpleasant sensation of mind or body during digestion".[2]

In prescribing a dietetic course we should say strict

[1] Dr James Ewin [illegible] [2] Ibid.

attention to the habits taste national peculiarities & constitutional idiosyncrasies of different individuals. With the exception of cases varied by these circumstances the following will be found valuable articles. -

In the 1st stage - we attention to diet requires more care being necessary to avoid errors in quantity than quality of the ordinary articles. Diet, a luxurious & been ice in excess - which are not found to disagree may be indulged in with moderation.

In the 3rd stage - Mucilages blanc mange, whey barley water rice water orange ade lemonade, jelly commonly with water sal mint plant, potatoes mashed with milk or water sweetened, rice pudding & custards without eggs & skim milk & such like nourishing articles. Dr Dickson recommends whey with 3 cream & the green fruits & nuts are serviceable.

In the intermediate stage - Articles of an intermediate character will be proper as milk, bread & milk, rice rice & milk, the farinaceous articles as mealy

potatoes, stale bread, crackers (Dr Chapman objects to crackers as offending the stomach & others object to them as constituting in crumbs — but with due deference I must declare my belief that if properly masticated & insalivated they, set well in the stomach are easy of digestion & have the costiveness effect — more than any other farinaceous article.) Eggs & oysters slightly cooked — white poultry, every variety of game — venison roast beef & mutton. (of all these milk is preferable as a drink — article of diet.

The following articles should be avoided in all stages of the complaint — viz: tough meat, gross & oily food — smoked salted fried & hard meats — Pork, roast pig, — veal, lamb, goose, ducks — meats not fresh & sure — fish — soups — all pickled & seasoned dishes — new bread, pastry, — deserts — all condiments, except salt — pepper, in moderation — raw vegetables, except potatoes, cabbage radishes, onions, peas, beans, tomatoes & cucumbers potatoes, cucumbers & melons — nuts — fruits, except particularly indicated, should be avoided.

Mucilages are forbidden except in the advanced stage.

Drinks. All alcoholic & fermented liquors - stimulating drinks of every kind - all acids & acescents, unless called for by some particular symptom - usually in a state of low temperature & diluent drinks freely indulged in are deleterious.

It would here seem to remark that it would be better for the dyspeptic never to drink unless urged to it by a sensation of thirst - which would seldom be the case. When nature makes a call for drink, pure water will satisfy her better than any artificial preparations. Black tea & Coffee of moderate strength & moderately indulged in are not so objectionable as they are generally supposed to be. They probably regular powers - more anodyne than strictly stimulating - they calm irritation & soothe the commotions of the system like the narcotics - but do not like them leave sedative or other unpleasant effects. When they prevent sleep they are so far un-

-jurious as the want of sleep is so.

As regards drinking at meals the rule should be - if there be thirst, drink to satisfy that want - if there be not, abstain.

I will conclude this dissertation with a few general rules for the Dyspeptic.

1. Avoid every thing which is found to aggravate symptoms.
2. Preserve great regularity of habit, especially in eating, drinking, sleeping & exercising.
3. In eating be particular to stated hours - which should be at short intervals, observing "the golden rule of eating little & often". Confine yourself to one dish at one meal. Masticate your food thoroughly - for this purpose, take large pieces. Eat with composure. Do not eat immediately after violent exercise. Nor exercise immediately after eating. "After eating, rest but not sleep".[i]
4. Exercise in the open air, daily & perseveringly -

i Professor Chapman.

5.

6.

7.

taking care not to carry it to fatigue – alternating between active & passive exercise. Walking, in the general, is the best exercise. In the stage of super-irritation, exercise is not advisable.

5. Insensible perspiration should be promoted by wearing flannel next the skin & by being otherwise comfortably clad. Friction with flesh brush or with salt is advisable.

6. Take cold or warm bath 2 or 3 times a week.

7. If the case prove inveterate, a change of climate, or a Sea voyage affords the best prospect of prolonging life. But in the words of Professor Chapman "What can we accomplish without the remote causes are removed? The patient must abandon the habits propensities & practices which caused the disease & tend to its continuance. If intemperate – he is to become sober. If luxurious & voluptuous – he must institute a thorough reform in his manner of living. If indolent – he must be awakened to industry & enterprize. If studious – "he must – abandon the midnight lamp". And if afflicted & calamitous – he must be upheld – by the promises of Hope & the gilded prospects yet before him".

H. R. Griswold